

ABSTRACT

- C
- 5 This invention provides an isolated polypeptide comprising an amino acid sequence of a N-terminal choline binding protein A truncate in which the amino acid sequence is set forth in any of SEQ ID NOS: 1, 3-7, or 9-11, including fragments, mutants, variants, analogs, or derivatives, thereof.

C

Also, this invention provides a isolated polypeptide comprising an amino acid sequence of a N-terminal choline binding protein A truncate, wherein the amino acid is set forth in SEQ ID NO 24, wherein the polypeptide retains its native tertiary structure and methods of preparation.

- C
- 10 This invention provides an isolated polypeptide comprising an amino acid sequence of a N-terminal choline binding protein A truncate, wherein the polypeptide has lectin activity and does not bind to choline. This invention provides an isolated immunogenic polypeptide comprising an amino acid sequence of a N-terminal choline binding protein A truncate.

- C
- 15 This invention provides an isolated nucleic acid encoding a polypeptide comprising an amino acid sequence of a N-terminal choline binding protein A truncate. Lastly, this invention provides pharmaceutical compositions, vaccines, and diagnostic and therapeutic methods of use.

09056039.040798